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SUPERSEDING
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MILITARY SPECIFICATION

BOXES, SHIPPING, CONSOLIDATION

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This document covers modular size weather-resistant wood cleated plywood, wirebound plywood, and fiberboard shipping boxes provided with pallet bases, as applicable (see 6.1).

1.2 Classification. Consolidation shipping boxes shall be of the following types, styles, and sizes, as specified (see 6.2):

Type I - Wood cleated plywood
Style 1 - Block-type base
Sizes 1 through 10 (see table I and figure 1)
Style 2 - Notched runner base
Sizes 11, 12, 13, 19 and 20 (see table II and figure 2)

Type II - Wirebound plywood
Style 1 - Block-type base
Sizes 1 through 10 (see table I and figures 3 and 4)
Style 2 - Notched runners base
Sizes 11, 12, 13, 19 and 20 (see table II and figure 5)

Beneficial comments (recommendations, additions, deletions) and any pertinent data that may be of use in improving this document should be addressed to U.S. Army Natick Research, Development and Engineering Center, Natick, MA 01760-5014, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 8115

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Type III - Fiberboard
Style 3 - Regular slotted container (RSC). Furnished with pallet base unless otherwise specified (see 6.2).
Sizes 1 through 10 (see table I and figure 6)
Style 4 - Half slotted container (HSC) box with telescoping sleeve and cap. Furnished with pallet base unless otherwise specified (see 6.2).
Sizes 23 and 24 (see table II and figure 7)
Style 5 - Flanged bottom tube with cap and pad. Furnished with pallet base unless otherwise specified (see 6.2)
Sizes 16, 17, 18, and 24 (see table II and figure 8)
Style 6 - Half slotted container (HSC) with cap. Furnished with pallet base unless otherwise specified (see 6.2).
Sizes 14 and 15 (see table II and figures 9 and 10)

1.2.1 Sizes and weight limitations. Boxes shall be of the size and weight limitations for each type and style as specified in tables I or II (see 6.1 and 6.2). The dimensions are expressed as outside, including the base or pallet, except that those specified for sizes 11, 12, and 13 in table II are inside dimensions. The height of size 14 and 15 is inside depth.

TABLE I. Box sizes, dimensions, and weight limitations for type I and II, style 1, and type III, style 3

Size	Dimensions (outside) (inches) Length	Width	Height	Weight contents (pounds)
1	86	31 3/4	41	1,500
2	57	31 3/4	41	1,500
3	43	31 3/4	41	1,500
4	29	31 3/4	41	1,500
5	58	43	41	1,500
6	86	31 3/4	20 1/2	1,500
7	57	31 3/4	20 1/2	1,500
8	43	31 3/4	20 1/2	1,500
9	29	31 3/4	20 1/2	1,500
10	58	43	20 1/2	1,500

TABLE II. Box sizes, dimensions, and weight limitations for type I and II, style 2 and type III, styles 4, 5, and 6 (see 6.1)

Size	Dimensions (see 1.2.1) (inches) Length	Width	Depth or Height	Weight of contents (pounds)
11	49	41	32 1/4	1,000
12	49	41	16 1/4	1,000
13	49 3/8	41 3/8	48 11/16	1,000
14	58	32	28 1/4	1,000
15	45	32	28 1/4	1,000
16	49	41	44	2,600
17	49	41	43	2,600
18	49	41	54	2,600
19	54 1/2	45	43	1,600
20	54 1/2	45	43	2,600
23	54 1/2	42	52 1/8	2,600
24	50	42	43	2,600

2. APPLICABLE DOCUMENTS

2.1 Government documents. Unless otherwise specified, the following documents of the issue in effect on date of invitation for bids or request for proposal form a part of this document to the extent specified herein.

SPECIFICATIONS

FEDERAL

FF-N-105 - Nails, Brads, Staples and Spikes, Wire Cut and Wrought

NN-P-71 - Pallets, Material Handling, Wood, Stringer Construction, 2-Way and 4-Way (Partial)

QQ-S-781 - Strapping, Steel, and Seals
QQ-W-461 - Wire, Steel, Carbon, Round, Bare and Coated
TT-W-572 - Wood Preservative, Water-Repellent
PPP-B-601 - Boxes, Wood, Cleated-Plywood
PPP-B-640 - Boxes, Fiberboard, Corrugated, Triple-Wall
PPP-B-1163 - Boxes, Corrugated Fiberboard, High Compression Strength, Weather-Resistant, Wax-Resin Impregnated
PPP-B-1364 - Boxes, Shipping, Corrugated Fiberboard, High Strength, Weather-Resistant, Double-Wall
PPP-F-320 - Fiberboard, Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes

MILITARY

MIL-L-19140 - Lumber and Plywood, Fire-Retardant Treated

STANDARDS

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129 - Marking for Shipment and Storage
MIL-STD-147 - Palletized Unit Loads
MIL-STD-731 - Quality of Wood Members for Containers and Pallets

OTHER GOVERNMENT DOCUMENTS

DEPARTMENT OF COMMERCE

PS-1 - Construction and Industrial Plywood

(Copies of documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

* 2.2 Other publications. Unless otherwise specified, the following documents of the issue in effect on date of invitation for bids or request for proposal form a part of this document to the extent specified herein.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 3951 - Standard Practice for Commercial Packaging

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

(Technical society and technical association documents are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this document shall take precedence. Nothing in this document, however, shall supersede applicable laws and regulations, unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Materials.

3.1.1 Lumber. Lumber shall conform to MIL-STD-731 as follows, except that lumber thickness and widths shall be nominal dimensions with standard tolerances of the applicable industry:

a. Class 2 structural - group I, II, III, or IV species.
b. Class 3 nonstructural - group II, III, or IV species.
c. Class 1 structural - groups II, III, or IV species.

* 3.1.1.1 Fire retardant lumber. When specified (see 6.2), fire retardant treated lumber in accordance with MIL-L-19140 shall be furnished.

3.1.2 Plywood. Plywood shall conform to grade CD, with exterior glue Group I Species, of PS-1. Surfaces may be sanded or unsanded. Plywood thickness is a nominal measurement, with 1/32 inch tolerance. Tolerances of +0 and -1/16 inch shall be allowed on the specified length and width.

* 3.1.2.1 Fire retardant plywood. When specified (see 6.2), fire retardant treated plywood in accordance with MIL-L-19140 shall be furnished.

3.1.3 Fiberboard.

3.1.3.1 Triple-wall fiberboard. Triple-wall fiberboard shall conform to class 2, weather-resistant of PPP-B-640.

3 1.3.2 Double wall fiberboard. Double wall fiberboard shall conform to PPP-B-1364.

3.1.3.3 Double wall wax impregnated fiberboard. Double wall wax impregnated fiberboard shall conform to class I, type DWCFI, grade 600 of PPP-B-1163.

3.1.4 Nails and brads. Nails and brads shall conform to the following types, sizes, or styles of FF-N-105:

a. Type I, style 1 common brads.
b. Type II, style 4, 3 penny (3d) 4-penny (4d) and 6-penny (6d) standard box nails.

c. Type II, style 7, 8, or 18; 8-penny (8d) cement coated coolers, sinkers, or 2 1/4-inch length pallet style nails.
d Type II, style 18, 3-inch long, 11-gage pallet type nails.
e. Type II, style 18, 2 1/2-inch, 11-gage pallet type nails.

3.1.5 Binding wire. Binding wire shall be fabricated of low carbon annealed steel in accordance with QQ-W-461.

3.2 Design and construction. The design and construction of all boxes shall be in accordance with the requirements specified herein and referenced documents. The boxes shall be capable of being assembled without the need to modify or rework any components or subassemblies. Boxes furnished in a set-up or knocked-down (KD) condition shall be complete with all components except materials such as nails, adhesive, tape, or strapping required for assembly or closure and strapping container. Components of one box shall be interchangeable with components of another box of the same type, style, and size.

3.2.1 Dimensions Boxes shall be furnished in size(s) as specified (see 1.2, tables I and II, and 6.2). Dimensions of table I, and those dimensions of table II not otherwise specified (see 1.2.1) shall be the outside overall measurements including pallet or base. Dimensions of the box shall be given in the sequence of length, width, and depth or height. Specific component dimensions and tolerances shall be as specified herein and as shown on applicable figures. Unless otherwise specified (see 6.2), a tolerance of plus or minus 1/4 inch shall be permitted in the dimensions of the assembled box. The block or notched runner base shall be furnished in the size as specified for the box. Unless otherwise specified herein, a tolerance of plus or minus 1/4 inch shall be permitted on the overall length and width of the pallet base.

3.2.2 Type I, style 1, sizes 1 through 10 wood cleated plywood block type base. The boxes shall be of dimensions shown in tables I and III. Components shall be of dimensions shown in table III. Variations in length dimensions of components will be permitted to comply with the requirements for cleats and panel fabrication of PPP-B-601. Cleats and bottom boards shall be made from lumber conforming to 3.1.1(a) and blocks from lumber conforming to 3.1.1(b). When specified (see 6.2), the moisture content requirements of MIL-STD-731 may be waived for cleats and bottom boards. Plywood shall be as specified in 3.1.2, with thickness as specified herein. Nails shall be as specified in 3.1.4, with size and spacing as specified herein.

3.2.2.1 Top, side and end panels. The top shall be one piece of 1/2-inch thick plywood, without cleats, having dimensions equal to the outside length and width of the box (see table III and figure 1). Side and end panels shall be cleated as shown on figure 1, with the plywood fastened to the cleats as specified in PPP-B-601. Plywood in the side and end panels shall be 5/16-inch thick. One piece of plywood shall be used on the side panels. One or two pieces of plywood shall be used on the end panels. When two pieces of plywood are used

on the ends, they shall be of equal size and thickness and joined by a 1- by 4-inch joint cleat secured between the framing as specified in PPP-B-601.

3.2 2.2 Base. The bottom panel shall be 1/2-inch thick plywood of the specified dimensions and fastened to cleats (see table III). A single piece of plywood shall be used for container sizes 3, 4, 8, and 9. Either two pieces of plywood butt-joined over the center cleat or one piece of plywood shall be used for the floor panel of other sizes Plywood floor and framing cleats shall be aligned flush on the outside edges and nailed together as specified in PPP-B-601 to form the bottom panel. The nominal 4-inch dimension of the blocks shall be the height and shall be not less than 3 1/2 inches, nor shall it vary more than 1/8 inch among the several blocks of any one box (see figure 1). The floor panel shall be nailed to each of the blocks with four 3-inch, 11-gage, pallet-type nails specified in 3 1.4 for all sizes. The blocks shall be positioned to project 1 inch on each side of the floor panel (see figure 1, detail 2). End blocks shall be positioned 3 inches in from the end of the container and additional blocks shown in table III shall be positioned at mid-length of the container. The bottom boards shall be nailed to the bottom of each block with seven 8d cement-coated or 2 1/2-inch, 11-gage, pallet type nails as specified in 3.1.4 for all sizes (see figure 1, detail 4).

3 2.2.3 Assembly. When containers are required to be assembled prior to shipping (see 6.2), they shall be assembled in accordance with 30.1.1, except that the top shall be tack nailed with not less than six 3d box nails, one into each end and two into each side.

TABLE III. Components of wood cleated plywood box, type I, style 1 number of pieces, and dimensions in inches

Part A. Components of 41-inch high boxes

Components	Size 1 86 x 31 3/4 x 41		Size 2 57 x 31 3/4 x 41		Size 3 43 x 31 3/4 x 41		Size 4 29 x 31 3/4 x 41		Size 5 58 x 43 x 41	
	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size
1/2" plywood										
Top	1	86 x 31 3/4	1	57 x 31 3/4	1	43 x 31 3/4	1	29 x 31 3/4	1	58 x 43
Bottom	1	83 7/8 x 29 5/8	1	54 7/8 x 29 5/8	1	40 7/8 x 29 5/8	1	26 7/8 x 29 5/8	1	55 7/8 x 40 7/8
5/16" plywood										
Sides	2	86 x 36 1/8	2	57 x 36 1/8	2	43 x 36 1/8	2	29 x 36 1/8	2	58 x 36 1/8
Ends	2	29 5/8 x 36 1/8	2	29 5/8 x 36 1/8	2	29 5/8 x 36 1/8	2	29 5/8 x 36 1/8	2	40 7/8 x 36 1/8
1" x 4" cleats										
Sides, through	4	86	4	57	4	43	4	29	4	58
Sides, filler	6	28 3/4	6	28 3/4	4	28 3/4	4	28 3/4	6	28 3/4
Ends, through	4	36 1/8	4	36 1/8	4	36 1/8	4	36 1/8	4	36 1/8
Ends, filler	4	22 1/4	4	22 1/4	4	22 1/4	4	22 1/4	4	33 1/2
Floor, through	2	29 5/8	2	29 5/8	2	29 5/8	2	29 5/8	2	40 7/8
Floor, filler	2	76 1/2	2	47 1/2	2	33 1/2	2	19 1/2	2	48 1/2
Intermediate filler	1	22 1/4	1	22 1/4	--		--		1	33 1/2

TABLE III. Components of wood cleated plywood box, type I, style 1 (cont'd)
number of pieces, and dimensions in inches

Part A. Components of 41-inch high boxes (cont'd)

Components	Size 1 86 x 31 3/4 x 41 No Pcs.	Size	Size 2 57 x 31 3/4 x 41 No. Pcs.	Size	Size 3 43 x 31 3/4 x 41 No Pcs.	Size	Size 4 29 x 31 3/4 x 41 No Pcs.	Size	Size 5 58 x 43 x 41 No. Pcs.	Size
1" x 4" bottom boards	2	86	2	57	2	43	2	29	2	58
1" x 1" cross bottom boards	3	24 1/2	3	24 1/2	2	24 1/2	2	24 1/2	3	35 3/4
4" x 6" blocks										
Blocks, center	2	6	2	6	--		--		2	6
Blocks, end	4	6	4	6	4	6	4	6	4	6

Part B. Components of 20 1/2-inch high boxes

Components	Size 6 86 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 7 57 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 8 43 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 9 29 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 10 58 x 43 x 20 1/2 No. Pcs.	Sizes
1/2" plywood										
Top	1	86 x 31 3/4	1	57 x 31 3/4	1	43 x 31 3/4	1	29 x 31 3/4	1	58 x 43
Bottom	1	83 7/8 x 29 5/8	1	54 7/8 x 29 5/8	1	40 7/8 x 29 5/8	1	26 7/8 x 29 5/8	1	55 7/8 x 40 7/8

TABLE III. Components of wood cleated plywood box, type I, style 1 (cont'd)
number of pieces, and dimensions in inches

Part B. Components of 20 1/2-inch high boxes (cont'd)

Components	Size 6 86 x 31 3/4 x 20 1/2		Size 7 57 x 31 3/4 x 20 1/2		Size 8 43 x 31 3/4 x 20 1/2		Size 9 29 x 31 3/4 x 20 1/2		Size 10 58 x 43 x 20 1/2	
	No. Pcs.	Sizes	No. Pcs.	Sizes	No. Pcs.	Sizes	No. Pcs.	Sizes	No. Pcs.	Sizes
5/16" plywood										
Sides	2	86 x 15 5/8	2	57 x 15 5/8	2	43 x 15 5/8	2	29 x 15 5/8	2	58 x 15 5/8
Ends	2	29 5/8 x 15 5/8	2	29 5/8 x 15 5/8	2	29 5/8 x 15 5/8	2	29 5/8 x 15 5/8	2	40 7/8 x 15 5/8
1" x 4" cleats										
Sides, through	4	86	4	57	4	43	4	29	4	58
Sides, filler	6	8 1/4	6	8 1/4	4	8 1/4	4	8 1/4	6	8 1/4
Ends, through	4	15 5/8	4	15 5/8	4	15 5/8	4	15 5/8	4	15 5/8
Ends, filler	4	22 1/4	4	22 1/4	4	22 1/4	4	22 1/4	4	33 1/2
Floor, through	2	29 5/8	2	29 5/8	2	29 5/8	2	29 5/8	2	40 7/8
Floor, filler	2	76 1/2	2	47 1/2	2	33 1/2	2	19 1/2	2	48 1/2
Intermediate filler	1	22 1/4	1	22 1/4	--		--		1	33 1/2
1" x 4" bottom boards	2	86	2	57	2	43	2	29	2	58
1" x 4" cross bottom boards	3	24 1/2	3	24 1/2	2	24 1/2	2	24 1/2	3	35 3/4
6" x 6" blocks										
Block center	2	6	2	6	--		--		2	6
Block end	4	6	4	6	4	6	4	6	4	6

3.2.3 Type I, style 2, sizes 11, 12, 13, 19 and 20 wood cleated plywood notched runner base. The boxes shall be of the design shown on figure 2. Wood components shall be in accordance with 3.1.1(a) or (b). Plywood shall be as specified in 3.1.2 and figure 2. Cleats lumber, and plywood thickness and width for these boxes shall be as shown or figure 2. The length of cleats and other components for sizes 11, 12, and 13 shall be of such size to abut all joints of each panel. Dimension of components for sizes 19 and 20 shall be as shown on figure 2. Panels shall be assembled in accordance with figure 2 and nailed in accordance with PPP-B-601. Assembly of the base shall be as shown on figure 2 with nailing as specified in PPP-B-601.

3.2.4 Type II, style 1, sizes 1 through 10 wirebound plywood, block-type base. The box shall be constructed with a block type base as shown on figures 3 and 4 and as specified herein.

3.2.4.1 Components. Components shall be as specified herein, in table IV, and as shown on figures 3 and 4 for applicable size. Cleats shall be made of wood specified in 3.1.1(b) or (c). Cleats for sides and ends shall be mitered. Blocks for pallet bases shall be of size specified in table IV and of solid wood specified in 3.1.1(b). Dimensions for cleats are actual dimensions, $\pm$ 1/32 inch. Plywood shall be as specified in 3.1.2.

3.2.4.2 Stringers. Stringer boards, fillers, bottom, cross boards and blocks shall be of lumber specified in 3.1.1(c) and be of dimensions specified in table IV. When applicable, adjustments in length shall be made for new lumber standards.

TABLE IV. Components of wirebound plywood box, type II, style 1 number of pieces, and dimensions in inches

Part A. Components of boxes 41 inches high

Components	Size 1 86 x 31 3/4 x 41		Size 2 57 x 31 3/4 x 41		Size 3 43 x 31 3/4 x 41		Size 4 29 x 31 3/4 x 41		Size 5 58 x 43 x 41	
	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size
1/2" plywood										
Top	1	86 x 31 3/4	1	57 x 31 3/4	1	43 x 31 3/4	1	29 x 31 3/4	1	58 x 43
Bottom panel (see 3.2.4.4.3)	1	83 1/8 x 28 7/8	1	54 1/8 x 28 7/8	1	40 1/8 x 28 7/8	1	26 1/8 x 28 7/8	1	55 1/8 x 40 1/8
3/8" plywood										
Sides	2	85 3/8 x 35 3/8	2	56 3/8 x 35 3/8	2	42 3/8 x 35 3/8	2	28 3/8 x 35 3/8	2	57 3/8 x 35 3/8
Ends	2	31 1/8 x 35 3/8	2	31 1/8 x 35 3/8	2	31 1/8 x 35 3/8	2	31 1/8 x 35 3/8	2	42 3/8 x 35 3/8
7/8" cleats										
Side top	2	85 x 1 3/8	2	56 x 1 3/8	2	42 x 13/16	2	28 x 13/16	2	57 x 1 3/8
Side bottom	2	85 x 1 3/8	2	56 x 1 3/8	2	42 x 13/16	2	28 x 13/16	2	57 x 1 3/8
End top	2	30 3/4 x 1 3/8	2	30 3/4 x 1 3/8	2	30 3/4 x 13/16	2	30 3/4 x 13/16	2	42 x 1 3/8
End bottom	2	30 3/4 x 1 3/8	2	30 3/4 x 1 3/8	2	30 3/4 x 13/16	2	30 3/4 x 13/16	2	42 x 1 3/8

TABLF IV. Components of wirebound plywood box, type II, style 1 number of pieces, and dimensions in inches (cont'd)

Part A. Components of boxes 41 inches high (cont'd)

Components	Size 1 86 x 31 3/4 x 41		Size 2 57 x 31 3/4 x 41		Size 3 43 x 31 3/4 x 41		Size 4 29 x 31 3/4 x 41		Size 5 58 x 43 x 41	
	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size	No. Pcs.	Size
Wire 13 gage		5		5		5		5		5
1" x 4" stringer board	2	86	2	57	2	43	2	29	2	58
1" x 4" filler boards	3	24 1/2	3	24 1/2	2	24 1/2	2	24 1/2	3	35 3/4
4" x 6" blocks										
Blocks center	2	6	2	6	--		--		2	6
Blocks end	4	6	4	6	4	6	4	6	4	6
1" x 4" bottom board	2	86	2	57	2	43	2	29	2	58
1" x 4" cross bottom boards	3	24 1/2	3	24 1/2	2	24 1/2	2	24 1/2	3	35 3/4

TABLE IV. Components of wirebound plywood box, type II, style 1 number of pieces, and dimensions in inches (cont'd)

Part B. Components of boxes 20 1/2 inches high

Components	Size 6 86 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 7 57 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 8 43 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 9 29 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 10 58 x 43 x 20 1/2 No Pcs.	Sizes
1/2" plywood										
Top	1	86 x 31 3/4	1	57 x 31 3/4	1	43 x 31 3/4	1	29 x 31 3/4	1	58 x 43
Bottom panel (see 3.2.4.4.3)	1	83 1/8 x 28 7/8	1	54 1/8 x 28 7/8	1	40 1/8 x 28 7/8	1	26 1/8 x 28 7/8	1	55 1/8 x 40 1/8
3/8" plywood										
Sides	2	85 3/8 x 14 7/8	2	56 3/8 x 14 7/8	2	42 3/8 x 14 7/8	2	28 3/8 x 14 7/8	2	57 3/8 x 14 7/8
Ends	2	31 1/8 x 14 7/8	2	31 1/8 x 14 7/8	2	31 1/8 x 14 7/8	2	31 1/8 x 14 7/8	2	42 3/8 x 14 7/8
7/8" cleats										
Side top	2	85 x 1 3/8	2	56 x 1 3/8	2	42 x 13/16	2	28 x 13/16	2	57 x 1 3/8
Side bottom	2	85 x 1 3/8	2	56 x 1 3/8	2	42 x 13/16	2	28 x 13/16	2	57 x 1 3/8
End top	2	30 3/4 x 1 3/8	2	30 3/4 x 1 3/8	2	30 3/4 x 13/16	2	30 3/4 x 13/16	2	42 x 1 3/8
End bottom	2	30 3/4 x 1 3/8	2	30 3/4 x 1 3/8	2	30 3/4 x 13/16	2	30 3/4 x 13/16	2	42 x 1 3/8

TABLE IV. Components of wirebound plywood box, type II, style 1 number of pieces, and dimensions in inches (cont'd)

Part B. Components of boxes 20 1/2 inches high (cont'd)

Components	Size 6 86 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 7 57 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 8 43 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 9 29 x 31 3/4 x 20 1/2 No. Pcs.	Sizes	Size 10 58 x 43 x 20 1/2 No. Pcs.	Sizes
Wire 13 gage	3		3		3		3		3	
1" x 4" stringer board	2	86	2	57	2	43	2	29	2	58
1" x 4" filler board	3	24 1/2	3	24 1/2	2	24 1/2	2	24 1/2	3	35 3/4
4" x 6" blocks										
Blocks center	2	6	2	6	--		--		2	6
Blocks ends	4	6	4	6	4	6	4	6	4	6
1" x 4" bottom board	2	86	2	57	2	43	2	29	2	58
1" x 4" cross bottom boards	3	24 1/2	3	24 1/2	2	24 1/2	2	24 1/2	3	35 3/4

3.2.4.3 Fabrication of box.

3.2.4.3.1 Top. The top panel shall consist of a single piece of 1/2-inch thick minimum plywood with dimensions equal to the outside length and width of the container (see 3.1.2 and table IV).

3.2.4.3.2 Sides and ends. Binding wires shall be minimum of 0.0915-inch diameter (13 gage), as specified in 3.1.5, and have a galvanized coating. There shall be a minimum of five binding wires on container sizes 1 through 5 and three binding wires on container sizes 6 through 10. Each end of each wire shall terminate in a loop fastener formed by bending the wire back in the opposite direction and by driving each end through the plywood and clinching. Each binding wire shall be secured by staples astride the wire. Staples shall be made from 16 gage hard tempered low carbon round steel wire having a galvanized finish. Staples shall be either converging or diverging type. The distance between legs shall be not less than 0.092 inch. Staples driven through plywood into cleats, battens, or stringers shall be 1 1/4 or 1 1/8 inches long, of 16 gage. Staples driven into plywood only shall be 9/16-inch long, 18 gage. Staples shall be driven at a spacing not to exceed 2 1/2 inches. Protruding points of staples shall be smoothly clinched. For container sizes 3, 4, 8, and 9, binding wires shall be continuous, resulting in four section sidewalls. For container sizes 1, 2, 5, 6, 7, and 10, the sidewalls shall be two section for ease of handling and assembly, resulting in loop closures at diagonally opposite corners of the box (see figure 4). Two pieces of plywood, butt-joined, may be used to span the length of containers. Plywood in ends (width) shall be one piece. Sides and ends shall be fabricated from 3/8-inch plywood with top and bottom interior cleats (see figure 4). Side and end walls shall be constructed with 3/8-inch follow-up overlap (see figure 3). The face grain of plywood used on the sides and ends shall be vertical.

3.2.4.4 Base.

3.2.4.4.1 Stringer boards. Stringer boards shall run parallel with the length of the container specified. The length of any one stringer shall equal the length of the container specified. The outside width of the assembled stringer boards and blocks shall equal the width of the specified container.

3.2.4 4.2 Fillers. Fillers, extending crosswise between the stringers, shall be located flush with the ends of the stringers and at the center of the bottom panels of the 57-, 58-, and 86-inch long containers. Each filler shall abut the outer stringer with gaps not greater than 1/8 inch. Staples or nails to attach the fillers and stringer boards to the plywood deck shall be not less than 1 1/4 inches long, driven in a staggered pattern not to exceed spacing 2 1/2 inches. Stapling or nailing of the fillers and stringer boards to the plywood deck shall be accomplished before complete assembly of the base. Any protruding points shall be clinched or flattened.

3.2.4.4.3 Bottom panel. Bottom panels shall be fabricated from 1/2-inch thick minimum plywood. Either two pieces of plywood shall be placed with the face grain direction crosswise to the length of the container and butt-joined over the center cleat for 57, 58 and 86 inches long, or one piece of plywood shall be used for the bottom panel. The bottom panel shall be sized to abut the bottom cleats of the assembled box (see table IV). Box sizes 3, 4, 8, and 9 shall have one piece of plywood on the bottom panel of the box. When one piece of plywood is used, the face grain may be in either direction. Blocks shall be placed between the stringer and bottom boards. Container sizes 1, 2, 5, 6, 7, and 10 shall have a total of six blocks and a total of three cross bottom members. Container sizes 3, 4, 8, and 9 shall have a total of four blocks and a total of two cross bottom members. Outer blocks shall be positioned 3 inches in from ends of stringers and bottom boards. Inner blocks shall be equally spaced. Container sizes 3, 4, 8, and 9 shall have no inner blocks. The nominal 4-inch dimension shall be the height of the block and shall be not less than 3 1/2 inches nor vary more than 1/8 inch among the several blocks on any one container. Four 3-inch pallet nails, as specified in 3.1.4, shall be driven from the top into each block (see figure 3). The bottom boards shall be nailed to the bottom at each block with a total of seven 8d cement coated or 2 1/2 inch pallet nails as specified in 3.1.4.

3.2.5 Type II, style 2, sizes 11, 12, 13, 19, and 20 wirebound plywood, notched runner base. The box shall be a wirebound box fitted to a plywood and wood notched runner base as shown on figure 5. The dimensions and size shown on figure 5 are applicable to sizes 19 and 20 only. Dimensions for sizes 11, 12 and 13 shall be scaled to the applicable box size specified. The body blank shall be two pieces of plywood with loop fasteners at each end as shown on figure 5. Two body blanks shall be jointed together with the loop fasteners to make the body. All boxes shall have mitered cleats as shown on figure 5 for required size. The box top shall be one piece of plywood reinforced as shown on figure 5 for required size. Components of the body blank, top and bottom, shall be as shown on figure 5 for required size. Binding wires and staples shall be as specified in 3.2.4.3.2 except that six binding wires shall be used on each box (see figure 5).

3.2.6 Type III fiberboard. Type III, sizes 1 through 10, 14 through 18, 23 and 24, fiberboard boxes shall be of any material specified in 3.1.3.1 through 3.1.3.3 and of dimensions specified in tables I and II.

3.2.6.1 Dimensions. Style 3 box sizes 1 through 5 shall be 35 1/4 inches high outside without the pallet base. Box sizes 6 through 10 shall be 14 3/4 inches high outside, without the pallet base. Other styles and sizes shall be as shown in table II.

3.2.6.2 Style 3, sizes 1 through 10. The box shall be in accordance with style E (RSC alternate construction only) of PPP-B-640 or style RSC of PPP-B-1364 and as shown on figure 6.

3.2.6.3 Style 4, sizes 23 and 24. The box shall be a three piece HSC box with telescoping sleeve and cap and shall be constructed in accordance with figure 7. The fiberboard shall be of any material specified in 3.1.3.1 through 3.1.3.3. The box shall consist of an HSC style bottom section (without top flaps), a sleeve or body (with top stiffening flaps) that fits snugly over the bottom section, and a top cap that consists of a sheet with 6-inch corner cut flaps to extend over the sleeve. The bottom shall be a half section with all flaps the same width and with the outer flaps meeting in the center. The stitched sleeve or body shall be the full depth of the box, and the slotted bottom section of the box shall be two-thirds the full depth of the box. Stiffening flaps on the top of the sleeve shall be not less than 4 inches, running full length and width of the sleeve.

3.2.6.3.1 Manufacturer's joint. Joint strips for the manufacturer's joint on the bottom section of style HSC and the sleeve of the style 4 box shall be a minimum 2-inch wide overlap and shall be compressed stitched; that is, prior to stapling the corrugations in the 2-inch overlap, the strip shall be completely crushed on both body and strip. The metal staples shall be applied approximately on a 45° angle across the strip and shall be spaced not more than 1 inch apart: the 1-inch measurement shall be from the lower tip of one staple to the top tip of the staple directly below. The stapling or stitching wire shall be flat, or arcuate, minimum 0.020 inch thick by 0.103 inch wide with a 1/2 ± 1/8-inch crown and shall have a commercially applied coating or plating such as galvanized (zinc coated) or copper wash. The direction of flutes shall be vertical for the sleeve and sides of the bottom section of style HSC.

3.2.6.4 Style 5, sizes 16, 17, 18 and 24. The box shall be made from any material specified in 3.1.3.1 through 3.1.3.3. The pallet base for style 5 shall be as specified in 3.2.6.7. The boxes shall be fabricated in the form of a tube with 4 ± 1/8-inch bottom flanges and a separate cap (see figure 8). The cap shall have 12 ± 1/8-inch flanges scored and slotted with corner flaps (see figure 8). The cap shall be folded to form an inverted tray with the corner flaps secured to the adjacent flanges with 5 staples evenly distributed in the overlap area (see figure 8). When triple-wall is used, the flap of the triple-wall cap may be crushed prior to stapling. Staples shall be as specified for the body joint of the tube when the flaps are crushed for the triple-wall cap or the uncrushed double-wall and wax-impregnated caps. Uncrushed flaps of the triple-wall cap shall be secured with staples specified for the body joint except that the length of the leg and crown shall be sufficiently long to penetrate the two thicknesses of fiberboard and provide a clinch. The tube shall be in accordance with figure 8 and may be fabricated with one or two body joints. The joints flap overlap shall be not less than 2 inches wide, and both the joint flap and over-lapped portion of the tube body of the triple-wall type shall be completely crush-rolled prior to stapling. When two body joints are used, the joints shall be positioned on diagonally opposite corners of the tube. The metal staples shall be placed approximately on a 45° angle across the strip and shall be placed not more than 1-1/2 inches apart; the 1-1/2 inch measurement shall be from the lower tip of one staple to the top tip of the staple directly below. A staple shall be placed 5/8 ± 1/8 inch from both ends of the flap.

The metal staple wire shall be flat, minimum 0.020 inch thick by minimum 0.103 inch wide with a minimum 3/8-inch crown length and shall have a commercially applied coating or plating such as galvanized (zinc coated) or copper wash. The direction of the flutes shall be vertical in all sides of the tube. To facilitate positioning of the bottom flanges of the tube on the load base, the score lines of the widthwise flanges shall be double scored a distance equal to the thickness of the fiberboard from the scorelines of the lengthwise flanges or all flanges shall be crushed adjacent to the scoreline, not less than 2-1/2 inches wide along the entire length of the flap. The outside length and width dimension of the triple-wall, double-wall, or wax-impregnated tube shall conform to the size of boxes specified (see 1 2.1). The overall height of the load including the pallet base shall not exceed the height specified in table II. The depth of the tube shall be determined from the height of the packed contents arranged in courses so that the top course of shipping containers protrudes above the top edge of the tube not less than 5 inches nor more than 7 inches (see figure 8). After fastening the tube to the load base in accordance with 30.1.6, a pad fabricated of fiberboard conforming to V3c, V3s, V4s, W5s, or W5c of PPP-F-320 or of the same material as the tube shall be placed on the bottom of the tube The pad shall overlap the flanges to within approximately 1 inch of the inside faces of the tube.

3.2 6.5 Style 6, sizes 14 and 15. The box shall be a style HSC with cap as shown on figures 9 and 10, as applicable and as specified herein. Construction of the pallet shall be as specified in 3.2.6.7. Boxes may be one or two piece construction of triple wall fiberboard as specified in 3.1.3.1. The body joints shall be at diagonally opposite corners of the box if it is of two-piece construction The body joint overlap shall be not less than 2 inches wide by the height of the body and shall be compressed stitched to fully overlap on the box panel to which the flap is stapled. Prior to stapling, the corrugations in the 2-inch overlap joint shall be completely crushed on both panel and flap. The metal staples shall be placed approximately on a 45° angle across the strip and shall be spaced not more than 1 inch apart; the 1-inch measurement shall be from the lower tip of one staple to the top tip of the staple directly below. Staples shall be centered on the flap with end staples placed not less than 3/4 inch and not more than 1 inch from ends of the flap. The corrugations of the box body shall be vertical in the side walls. The wire shall be flat, or arcuate, minimum 0.020 inch thick by 0 103 inch wide with 1/2 ± 1/8-inch crown, and shall have a commercial finish or plating. The bottom of the box blank shall be a regular slotted construction RSC. The top of the box blank shall have 4 ± 1/8-inch long flaps. Each box shall be fitted with a snug-fitting corner cut cap made from the same material as the box. The cap shall have a minimum 4-inch flange and be constructed in accordance with the applicable requirements of 3.2.6.4.

3.2.6.6 Pallet base for type III, style 3, sizes 1 through 10. Pallet base for type III, sizes 1 through 10, shall be a double wing, wood block type as shown on figure 7 and as specified herein. Deck boards, stringers, and stringer boards shall conform to 3.1.1(a). Post shall be made from wood as specified in 3.1.1(c). The completed pallet shall form a rectangle and intermediate deck boards and base boards shall be parallel to the edge boards. Four equally spaced

top deck boards shall be nominal 1 x 4 inch length as required for the pallet width and equal to the length of applicable box (see figure 7). Pallets shall be provided with three equally spaced nominal 1 x 4 inch bottom deck boards. Top deck boards and bottom boards shall be predrilled, if necessary, to prevent splitting. Stringer boards shall be nominal 1 x 4 inch, with length same as the specified length of the pallet and equal to the width of the applicable box (see figure 7). Pallets for the container sizes 2, 3, 5, 7, 8, and 10 shall have 9 blocks as shown in figure 7. Pallets for container sizes 1 and 6 shall have 12 blocks, and pallets for container sizes 4 and 9 shall have 6 blocks. Blocks shall be 4 inches long by 3-1/2 by 3-1/2 inches with the 4 inch edge of the blocks parallel to the stringer boards. End blocks shall be located flush with the ends of the stringer boards and 3 inches from the ends of the top deck boards and bottom boards. The intermediate blocks shall be equally spaced. Tolerance on the height of the 3-1/2 inch block dimension shall be plus or minus 1/16 inch. Tolerance of the other two dimension shall be plus or minus 1/8 inch. Nails shall be 8d cement coated or 2-1/2 inch pallet type nails as specified in 3.1.4, except that length of nails used for attachment of boards to blocks shall be such as to provide 1-3/4 inches imbedded in the block. Nails used to attach top deck boards to stringer boards shall be long enough to provide 1/2 inch (minimum) clinch on the underside. Two or more nails shall be used for each attachment. The nails shall be no closer than 1 inch apart and at least 3/4 inch from any wood member edge. Alternatively, pallets constructed with stringers as specified in 3.2.6.7 may be used.

3.2.6.7 Pallet base for type III; styles 4, 5, and 6; sizes 14 through 18, 23, and 24. The load base for type III, sizes 14 through 18, 23 and 24, shall be a wood pallet 40 inches in length by 48 inches in width in accordance with type IV of NN-P-71 and as specified herein. For box sizes 14, 15, and 23, the pallet shall fit the box within ± 1/2 inch. The overall length and width tolerance of each pallet shall be ± 1/2 inch. The type and quality of wood shall be in accordance with group I, II, III, or IV or MIL-STD-731. Deck boards shall be uniform thickness and not less than 11/16 inch thick and not less than 3-1/2 inches in width except that the width of each of the two outside deck boards (top and bottom) shall be not less than 5-1/2 inches. The space between top deck boards shall not exceed 3 inches. The minimum width of the bottom center deck board or boards shall be 5-1/2 inches. Three stringers may be used in place of the four specified in NN-P-71, provided there is no change in the location of the outer stringer and the third stringer is centered. Stringers shall be a uniform height of not less than 3-1/2 inches and thickness of not less than 1-1/2 inches. The stringer cut outs shall be 1-1/8 (+ 1/8 and - 0 inches) by 9-3/4 ± 3/4 inches. Alternatively, nails of carbon steel having a hardness on the Rockwell C scale of 40 to 50 and the following minimum requirements may be used for softwood and hardwood pallets: length shall be 2-1/2 ± 1/16 inch; wire diameters 0.110 ± 0.002 inch; head 9/32 ± 1/32 inch; point 5/32 inch long maximum with diamond or chisel point, provided the width does not exceed the wire diameter. The thread shall be spiral 4 flutes, helical angle at the pitch diameter of 60 degrees ± 5 degrees, with a plane perpendicular to the axis. The head of nails shall be driven flush or below the

surface of the deckboards. Alternatively, block pallets as specified in 3.2.6.6 using 9 blocks may be used. Branding of pallets shall not be required.

3.3 Marking.

3.3.1 Type I and type II. Each box shall be marked with the specification number, type, style, container dimensions, box manufacturer's name and address, and, for sizes 1 through 10, the maximum recommended weight of 37 pounds per cubic foot. All markings shall be limited to 15 square inches in area and shall be located in a lower corner of one side panel in letters approximately 5/16 inch high except that the specification number shall be in letters approximately 3/4 inch high. Arrangement of the markings shall be as follows:

SPECIFICATION MIL-B-43666

Type _____, Style _____

L _____, W _____, H _____

Box manufacturer's name and address

Recommended weight limit _____ lb
per cubic foot

3.3.2 Type III. Each type III box shall be marked in accordance with 3.3.1 except that each box shall bear the applicable certificate of the box maker in compliance with the requirements of Carrier's Freight Classification Rules. Additional marking in 3/8 inch bold face type identifying the type and style of box shall be placed under the box maker's certificate. The following special handling markings in block letters not less than 1-1/2 inches in height shall be stenciled on each side and end of each type III box:

"CAUTION

LIFT BY WOOD BASE ONLY"

Each type III style 3 box shall be marked on each side and end as shown below. Marking may be applied by labeling or stenciling, using letters at least 1/2 inch high. If labels are used, local reproduction is authorized.

"THIS LEVEL B CONTAINER IS ONLY FOR
SHIPMENT IN CONEX, SEAVAN, OR MILVAN.
AFTER REMOVAL FROM CONEX, MILVAN, OR
SEAVAN, IT MUST BE SUBJECTED TO ONLY
LIMITED MOVEMENT AND BE STORED INDOORS."

Each type III. styles 4, 5, and 6 box shall be marked in the same manner with the following legend:

"THIS LEVEL B CONTAINER IS ONLY FOR SHIPMENT UNDER KNOWN PROTECTED CONDITIONS, LIMITED MOVEMENT, AND INDOOR STORAGE."

The special precautionary markings specified above shall, to the extent possible, be applied on the right half portion of each side and end and be as high on the box as space permits without interfering with other prescribed markings.

3.3.3 Additional marking. The legend, "PACKING LIST", in 1 ± 1/8-inch high letters, shall be applied on two upper adjacent corners of the sides of the box and positioned approximately 6 inches from the top edge of the box.

* 3.4 Preservative treatment. When specified (see 6.2), type I or II boxes shall be treated as follows:

a. For non-food carrying boxes, type I and type II boxes shall be treated with composition C of TT-W-572. All pallets shall be treated with composition C of TT-W-572.

b. For food carrying boxes, type I and type II boxes shall be treated with composition D of TT-W-572 but with 1.0 percent copper-8-quinolinolate. The treated wood shall be thoroughly dried and and be free of solvent.

c. Type III boxes are not to receive any fungicidal treatment.

3.5 Workmanship. Boxes shall be free from defects, protrusions, or sharp edges which may result in damage or injury to the contents of handler and free from imperfections that may affect their utility. The interiors shall be clean. The component or blanks shall be cut clean without ragged or jagged edges. Boxes and pallets shall be square with all components secured tightly. There shall be no improper fitting of components such as top to body, sides to base or pallet. There shall be no splitting of wood components resulting from over driving or clinching of fasteners, from use of improper size fasteners, or from the omission of predrilling. Fasteners shall be clinched. No portion of the bearing surface of a fastener shall protrude above the surface of the plywood or cleat, nor shall it be overdriven more than 1/32 inch. Fasteners shall not be visibly deformed except where they are cliched.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right

to perform any of the inspections set forth in the document where such inspections are deemed necessary to ensure that supplies and services conform to prescribed requirements.

* 4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this document shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the document shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.

* 4.1.2 Responsibility for dimensional requirements. Unless otherwise specified in the contract or purchase order, the contractor is responsible for assuring that all specified dimensions have been met. When dimensions cannot be examined on the end item, inspection shall be made at any point, or at all points in the manufacturing process necessary to assure compliance with all dimensional requirements.

4.1.3 Certificate of compliance. Where certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.

4.2 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.

4.2.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected and tested in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified or qualified in this document or applicable purchase documents.

4.2.2 End item inspection.

* 4.2.2.1 Visual examination. The end item shall be examined for the defects listed in table V, as applicable. The lot shall be expressed in units of boxes of one type, style and size. The sample unit shall be one complete box, knocked down or set up, as applicable. The inspection level shall be S-2 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 4.0 In addition, when applicable, the end item shall be examined for defects listed in PPP-B-601, PPP-B-640, PPP-B-1163, and PPP-B-1364 at the inspection levels and AQLs specified therein.

TABLE V. Defects for boxes and pallets, as applicable (type I, II and III boxes)

Examine	Defect
Design, construction and workmanship	Not as specified or not in accordance with figures
Boxes	Not type, style, or size as specified or components missing
Knocked down boxes	Not complete with all components Cannot be assembled without modification
Location of components	Not as shown on figures Not interchangeable for same type, style, and size box
Plywood	Panel construction not as specified Base not as specified
Wirebound	Not as specified Loop fasteners too short for satisfactory closure Splitting of plywood caused by staples or staples not smooth clinched Cleats not mitered for sides and ends Binding wires not secured
Fiberboard	Flaps not secured as specified Cap for style 5 not secured in each corner as specified Joint flaps overlap less than 2 inches wide Overlapped part of tube body not crushed rolled Body joints not on diagonally opposite corners for two piece construction
Pallets	Not as specified Length and width dimensions not the same as box base dimensions Deck boards not equally spaced Boards split
Stringer	Not located or assembled as specified
Workmanship	Box interior not clean Ragged or jagged edges Sharp protrusions Components not properly secured

TABLE V. Defects for boxes and pallets, as applicable (type I II and III boxes) (cont'd)

Examine	Defect
Workmanship (cont'd)	Fastenings deformed, not properly clinched when required Excessive splitting of wood members resulting from nailing or stapling
Marking for identification	Not as specified Exceeds 15 square inches Not located as specified

* 4.2.2.2 Dimensional examination. Examination shall be made of the boxes and pallet bases to determine compliance with the applicable dimensional requirements of 1.2.1, 3.2.1, tables I and II and figures 1 through 10 according to the type, style and size presented for acceptance (see 1.2). The lot size shall be expressed in units of boxes of one type, style and size. The sample unit shall be one complete box. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 4.0.

* 4.2.3 Packaging inspection. The fully packaged end items shall be examined for the defects listed below. The lot size shall be expressed in units of shipping containers. The sample unit shall be one shipping container fully packaged. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units shall be 4.0.

Examine	Defect
Weight	Unit load of fiberboard boxes exceeds 1000 pounds
Workmanship	Knocked down panels not bundled or crated in like sizes
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application

* 4.2.3.1 Palletization examination. The fully packaged and palletized end item shall be inspected for the defects listed below. The lot shall be expressed in units of palletized unit loads. The sample unit shall be one palletized unit load fully packaged. The inspection level shall be S-2, and the AQL, expressed in terms of defects per hundred units, shall be 4.0.

Examine	Defect
Finished dimensions	Length, width, or height exceeds specified maximum requirement
Palletization	Pallet pattern not as specified Interlocking of loads not as specified Load not bonded with required straps specified Not as specified
Weight	Exceeds maximum load limits
Marking	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application

5. PACKAGING

5.1 Packing. Packing shall be level A or Commercial, as specified (see 6.2).

5.1.1 Level A.

5.1.1.1 Cleated plywood and wirebound plywood boxes. Panels of one size box, in a knocked-down (KD) condition, shall be uniformly bundled and palletized in accordance with the requirements of MIL-STD-147 or crated in quantities that permit easy loading and handling. Boxes KD or setup shall be prepared for shipment in a manner to ensure carrier acceptance and safe delivery to destination.

5.1.1.2 Fiberboard boxes. Fiberboard box blanks, sleeves, caps, and pads that form one size box shall be grouped separately in equal or in multiples of equal numbers with top and bottom waster sheets secured by steel strapping minimum 3/4 by 0.020 inch, conforming to type I or IV, finish A of QQ-S-781, a minimum of two straps applied girthwise. Fork lift entry voids shall be provided through the use of waster blocks or bungs approximately 1/3 distance from the top of the unit load. Grouped bundles shall be placed on a pallet constructed in accordance with 3.2.6.6 or 3.2.6.7 to accommodate the KD boxes. Each load shall be bonded with primary and secondary straps in accordance with bonding means K or L of MIL-STD-147, weight and height limitations as specified therein.

* 5.1.2 Commercial. Boxes shall be packed in accordance with ASTM D 3951.

* 5.2 Marking. In addition to any special marking required by the contract, packs and pallet loads shall be marked in accordance with MIL-STD-129 or ASTM D 3951, as applicable. For fiberboard boxes with sleeve, cap, and pallet unitized separately, set marking requirements shall apply. For unit loads, the quantity per unit load shall be marked on each load.

6. NOTES

6.1 Intended use. Boxes covered by this document are intended for domestic and overseas shipment of supplies and equipment. The boxes are intended to improve the packing and grouping of overseas shipments: to compensate for shortage of terminal handling facilities, equipment and personnel; and to protect against material pilferage, physical loss, and damage in transit.

6.1.1 Type I and II boxes. Type I and II containers compensate for lack of covered storage and for severe environmental factors that may be encountered. They are also intended for consolidation shipments of like as well as unlike stock numbered commodities. The load (contents) is to be carried by the base of the containers or the pallet. The superstructure provides for superimposed loading, maintaining the integrity of the load, and other protection stated herein. These boxes are intended to carry loads of weights as indicted in table I and II. These boxes should not be used for loads exceeding 37 pounds per cubic foot. Loads exceeding this limit require additional box reinforcement. These boxes should not be moved by lifting other than by the base. Type I and II containers should not be used as inserts for CONEX transporters. They may be used as inserts for SEAVAN or MILVAN, or as exterior shipping containers for conventional transportation. Sizes 1 through 10, 14 through 18, 23, and 24, are specifically intended for CONEX, SEAVAN or MILVAN shipments. Sizes 11, 12, and 13 are intended for shipment of clothing, textiles and related items. Sizes 13 is not intended for CONEX, MILVAN, or SEAVAN.

6.1.2 Type III boxes. Type III fiberboard boxes should be restricted to CONEX, SEAVAN, or MILVAN use for level A overseas shipments; however, they may be used as shipping containers for level B overseas shipments and domestic consolidation boxes. Type III, style 3 boxes should be used for items of assorted stock numbers to be loaded at origin as inserts only for shipment in CONEX, SEAVAN, or MILVAN to a single consignee address code. Type III style 5 boxes are intended for use as semiperishable subsistence unit load devices as required by MIL-L-35078 and should be sized (in height) depending on the anticipated height of the contents.

6.2 Ordering data. Acquisition documents should specify the following:

a. Title, number, and date of this document.
b Type, style, and size of box (see 1.2, table I and II, and 3.2.1).
c. When pallet base is not required, for type III box (see 1.2). (It may be economically advantageous to use pallets that are locally available, or to purchase pallets for boxes from separate sources.)
d. When pallet bases are ordered separately, state applicable type III box for which pallet is intended (see 1.2 and 1.2 1).

e. When fire retardant lumber or plywood is required (see 3.1.1.1 and 3.1.2.1).
f. When other tolerances are required (see 3.2.1).
g When cleats and bottom boards moisture requirements may be waived for type I, style 1 box (see 3.2.2).
h. When type I, style 1 boxes are required to be assembled prior to shipping (see 3.2.2.3).
i. Preservative treatment, when type I or II boxes are to be shipped overseas (see 3.4).
j. Selection of applicable level of packing (see 5.1).
k. When round steel strapping is required for reinforcing type III, style 3 boxes (see 30.2.4).

6.3 Changes from previous issue. The margins of this document are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous issue have been made. This was done as a convenience only and the Government assumes no liability whatsoever for inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - GL
Navy - SA

Review activities:

Army - MD, AT
Navy - MC, AS
DLA - GS

User activities:

Army - CR, AR
Navy - OS, YD

Preparing activity:

Army - GL

Project No. 8115-0469

MILITARY SPECIFICATION

BOXES, SHIPPING, CONSOLIDATION

APPENDIX

10. SCOPE

10.1 This appendix covers requirements for assembly, closure, and reinforcing of boxes.

20. APPLICABLE DOCUMENTS

SPECIFICATIONS

FEDERAL

FF-N-105	-	Nails, Brads, Staples and Spikes, Wire Cut and Wrought
QQ-S-781	-	Strapping, Steel, and Seals
PPP-B-601	-	Boxes, Wood, Cleated - Plywood
PPP-S-760	-	Strapping, Nonmetallic (and Connectors)
PPP-T-97	-	Tape, Pressure-Sensitive Adhesive, Filament Reinforced

STANDARDS

MILITARY

MIL-STD-105	-	Sampling Procedures and Tables for Inspection by Attributes

30. REQUIREMENTS

30.1 Assembly.

30.1.1 Type I, style 1. The assembly and nailing shall be as shown on figure 1 (detail 3). Two nails shall be driven at the end of each through edge cleat of the sides into the through edge cleat of the ends, and at the lower end of each through edge cleat of the ends into the through edge cheat of the bottom. Additional nails to join the panels shall be spaced not greater than specified in PPP-B-601. Points of driven nails shall be firmly imbedded in cleats and shall not be in the joint between cleat and plywood or the edge of plywood. Nails used for joining panels in assembly of boxes shall be 8d coolers, sinkers cement coated, or mechanically deformed (screw type or annular ring type). The top shall be nailed onto the sides and ends with six penny nails spaced 3 inches apart, except that nails shall not be driven into the end grain of the vertical cleats. Nails shall be driven so their points remain imbedded in the cleats of the sides and ends.

30.1.2 Type I, style 2. The assembly shall be in accordance with PPP-B-601 as shown on figure 2.

30.1.3 Type II, style 1. The side walls shall be set up to form a tube. In folding sides and ends, care should be taken to seat the overlap properly in order to avoid tensioning the wires at the corner. The top loop shall be closed with a Sallee Closer hand tool as shown in figure 4. The tube assembly shall be located around the perimeter of the plywood deck of the base and the remaining loop closure secured. The bottom cleats of the side walls shall be adjacent to and be backed up full length by the plywood deck. Side panels shall be secured to the base using 2-1/2 inch (minimum) annular ring or helical thread 11-gage (0.120 diameter) pallet nails, toenailed immediately above the bottom wire downward through to the blocks. The end panels shall be secured with three equally spaced 1-1/4 inch 3d annular ring or helical thread 11-gauge (0.120 diameter) nails toenailed immediately above the bottom wire downward into the end fillers.

30.1.3.1 Attaching the top. When the box is assembled and packed with a commodity, the plywood top shall be nailed to the top cleats of the sides and ends with minimum 3d cement coated coolers, sinkers or nails spaced not more than 4-1/2 inches apart. Points of the nails shall be embedded in cleats and shall not be in the joint between the cleat and plywood or edge of the plywood. Nail points shall not protrude.

30.1.4 Type II, style 2. The sidewalls shall be set up with the bottom cleats next to the plywood base on the top deck board and skids. The two outside loops shall be temporarily secured by hand. Two equally spaced 2-1/2 inch pallet nails, adjacent to the wire, shall be driven through each end bottom cleat into the base deck boards. One 2-1/2 inch pallet nail shall be toenailed through the center of the rear bottom cleat into the center skid(s). The front panel may be left open to pack through, if desired. When packed, all loops shall be partially secured by hand. One 2-1/2 inch pallet nail shall be toenailed through the center of the front bottom cleat into the center skid(s). The top shall be placed in position and nailed to the top cleats as shown on figure 5 and as specified in 30.1.3.1. Closure of loops shall then be made with a hand tool (Sallee Closer (see figure 4)) or other tool. When other than Sallee Closer is used it should be determined that the closure is the same in all respects, i.e, tightness of wire, fold over of loops, and radius bends of the wire. The type, box configuration, weight of contents, and user experience shall be considered when determining the number of nails and straps used at assembly.

30.1.5 Type III, styles 3, 4, and 6. Fiberboard boxes shall be squared onto the pallet base and secured thereto through the deck using large head nails. Metal disk washers may be used under the head of the nail at the option of the contractor. The top flaps of the style RSC box shall be closed in accordance with the appendix of the applicable box document, and the cap of style HSC box or cap of the tube shall be formed into a lid by securing each corner with at least two strips of minimum 1-inch tape conforming to PPP-T-97. In addition,

style 3 containers shall have the manufacturer's joint reinforced with similar strips of tape located 2 inches from the top and 2 inches from the bottom with additional strips spaced at intervals of 5 inches along the joint. When boxes are not used with the pallet the bottom flaps shall be closed in accordance with the appendix of the applicable box document.

30.1.6 Type III, style 5 The tube, with the bottom flanges folded inwards in a flat position, shall be fastened to the load base with large head roofing nails conforming to type II, style 20 of FF-N-105. Nails shall be applied from the inside of the tube and shall penetrate the top deck boards approximately three-quarters of their thickness. Two nails shall be driven through each corner where the flanges overlap each other, and two additional nails shall be evenly distributed throughout each side and end panel flange (see figure 8). Nails shall be so driven that their heads shall not protrude above the surface of the fiberboard. Alternatively, flanges may be fastened to the load base with staples applied with pneumatic or mechanical guns. Staples shall conform to type III, style 3, minimum 1/2-inch crown width of FF-N-105. These shall pass through the fiberboard and shall penetrate the top deck approximately three-quarters of their thickness. Four staples shall be driven through each corner where the flanges overlap each other and two additional staples shall be evenly distributed throughout each side and end panel flange. Staples shall be so driven that the crown shall not protrude above the surface of the fiberboard.

30.2 Reinforcing

30.2.1 Type I, style 1. Each vertical corner shall be reinforced with two 8-inch pieces of steel strapping conforming to class 1, type I or II, finish A of QQ-S-781, 3/4 inch wide by 0.023 inch thick, attached to the cleats with mechanically driven galvanized staples or nails (see figure 1). The staples shall be type III, style 3, 7/16 inch long and nails shall be 1-inch long as specified in FF-N-105. Alternatively, steel strapping may be used that is 3/4 by 0.028 inch, or 3/4 by 0.025 inch conforming to class 1, type I or IV, finish A of QQ-S-781 secured with galvanized roofing nails conforming to type II, style 20, 0.135 inch by 7/8 inch long, large head, zinc coated steel roofing nails, or 1 inch long, mechanically driven nails as specified in FF-N-105. Perforations in the strapping shall be spaced 1/2 to 1-3/4 inches apart. On the 41-inch high box, strapping shall be located 13 inches and 26 inches, respectively, from the top. Two fasteners shall be driven through the strapping so points enter the end through edge cleat, and two fasteners shall be driven through strapping so the points enter the side filler edge cleats to secure each length of strapping tightly around the corner. On 20-1/2 inch high boxes, straps shall be located 2 inches and 15 inches, respectively, from the top. Additional 8-inch pieces of straps shall be applied to the size 5 and 10 containers at the center of each edge formed by the bottom and end panels in the same number.

30.2.2 Type I, style 2; and type II, style 2. Strapping shall be 3/4-inch by 0.025-inch or 3/4-inch by 0.028-inch flat metal strapping conforming to class 1, types I or IV, finish A or 12-gauge round wire strapping, conforming to class 2, type V or IV, finish A of QQ-S-781. Strapping shall be applied as shown in

figures 2 and 5, as applicable. Edge protectors and cross-tie seals are not required. Stapling of straps to type I, style 2 boxes shall be in accordance with PPP-B-601 and figure 2.

30.2.3 Type II, style 1. Strapping shall be 3/4-inch by 0.023-inch flat metal strapping conforming to class 1, type I or IV, finish A of 12 1/2 -gauge round wire strapping conforming to class 2, type V or VI, finish A of QQ-S-781. The closure shall be completed by first applying one lengthwise strap centered between both stringer boards for all container sizes except sizes 5 and 10. Container sizes 5 and 10 shall have two lengthwise straps. One each shall be placed along the inner side of the stringer boards. Girthwise strapping shall then be applied. For all container sizes except sizes 3, 4, 8, and 9, the strapping shall be applied crosswise at both end fillers and two each, equally spaced, between the end straps. Container sizes 3, 4, 8, and 9 shall have one girthwise strap applied crosswise at each end filler and one at the center. Strapping shall be completed by applying one horizontal strap for container sizes 1, 2, 3, 4, and 5. The horizontal strap shall be placed as close to center wire as can be obtained. Staples shall not be applied to secure strapping in position, but strapping shall be tensioned to sink into the edges of the wood. Location and number of straps for each container size shall be as follows:

Container size	Lengthwise	Girthwise	Horizontal
1 and 2	1	4	1
3 and 4	1	3	1
5	2	4	1
6 and 7	1	4	0
8 and 9	1	3	0
10	2	4	0

30.2.4 Type III, styles 3, 4 and 6. Boxes shall be closed and strapped with minimum 3/4 by 0.023 inch strapping conforming to class 1, type I or IV, finish A of QQ-S-781, or minimum 0.025 inch thick nonmetallic strapping having a minimum breaking strength of 900 lbs and conforming to type II or III of PPP-S-760, except that buckles (connectors) shall not be used. Container sizes 4 and 9, shall have two girthwise straps applied inside the pallet stringer. When specified (see 6.2), round steel strapping conforming to gage 12-1/2, class 2, type V or VI, finish A of QQ-S-781 shall be used to reinforce style 3 boxes. Container sizes 1, 2, 3, 5, 6, 7, 8, 10, 14, 15, 23, and 24 shall have three girthwise straps. The straps for container sizes 2, 3, 4, 5, 7, 8, 9, 10, 14, 15, 23, and 24 shall be applied under the pallet top deck boards adjacent to the stringers. Container sizes 1 and 6 shall have straps applied under the pallet top deck boards adjacent to the outer stringer and one strap located around the center of the container. The outside strap shall be located inside the outer stringers. Edge protectors shall be used under steel straps.

30.2.5 Type III, style 5. Two straps shall be applied parallel to the pallet width dimension through the strap slots provided in the stringers of the pallet base. Straps shall be applied parallel to the pallet length dimension positioned

as follows: a strap shall be positioned adjacent to and on the inside of the stringers on each side of the load One center strap shall be positioned between the two center stringers of 11, 12, 13, 16, 17, 18, and 24 base. Strapping shall be restricted to nonmetallic straps conforming to type II or III of PPP-S-760 and shall have a breaking strength of not less than 900 pounds. All straps shall be applied straight, not twisted on sides, ends, or tops, and tensioned so that not less than 14 pounds of force shall be required to deflect the strap 1 inch when tested in accordance with 40.3.

40. INSPECTION

40.1 Inspection of boxes. Boxes shall be inspected to determine compliance with the requirements of this appendix. Sampling shall be conducted in accordance with MIL-STD-105.

40.2 Examination for assembly, closure and strapping of boxes. The assembly, closure, and strapping of the box shall be examined to determine conformance to the requirements of this appendix. Defects shall be scored as indicated in table VI. The lot shall be expressed as units of boxes. The sample unit shall be one completely assembled and reinforced box. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 4.0.

TABLE VI. Examination of assembly closure and strapping

Examine	Defect
Assembly	Not readily assembled
	Improper fit of components
	Overlap of wirebound box not sealing properly
	Not nailed as specified
	Nails not driven as required
	Nail size not as specified
Reinforcing	Strapping not as specified
	Size not as specified
	Number and location not as specified
	Loose strapping

40.3 Testing.

40.3.1 Testing for tensioning of nonmetallic strapping. Nonmetallic straps on containerized loads shall be tested in accordance with 40.3.2. A minimum of 5 loads shall be selected at random from the assembly, closure, and strapping sample size selected in accordance with 40.2. One vertical strap shall be selected at random from each load selected and tested in accordance with 40.3.2. Failure to meet the requirement of 30.2.5 shall constitute a failure of the test.

40.3.2 Nonmetallic strap tension test. Materials required are a spring scale or force gage having an accuracy of 1 percent throughout a range of 0 to at least 30 pounds. The scale shall have marked increments of 1 pound and be provided with a hook for sliding under the strap. A ruler marked in 1/16-inch increments shall be used. The test shall be conducted at a temperature of 73° ± 10°F and 8 hours or more after tensioning of the strap. The hook of the scale shall be slipped under the strap to be tested at a point on the side of the unit load 10 ± 1/2 inches from the top. The ruler shall be placed at right angles to and along side of the strap and next to the scale. The free end of the scale shall be away from the unit load 10 ± 1/2 inches from the top, the body hook at right angle to the load and the strap displaced 1 inch as measured with the ruler. The resultant reading on the scale shall be not less than 14 pounds.

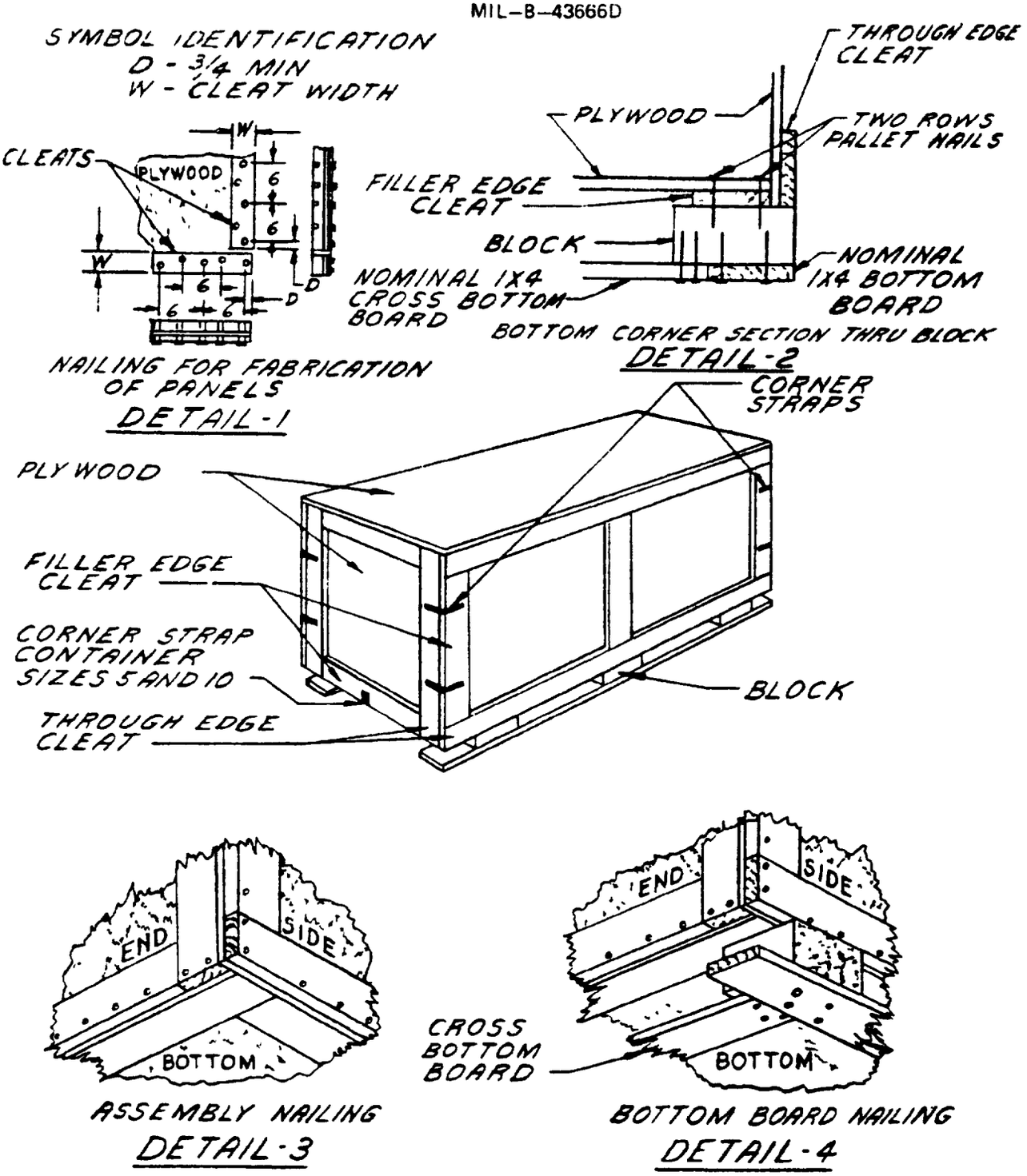
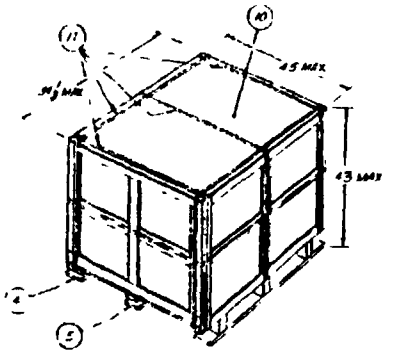
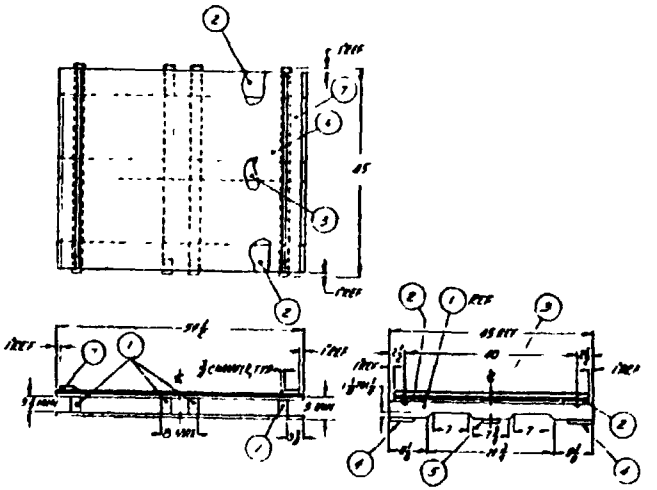


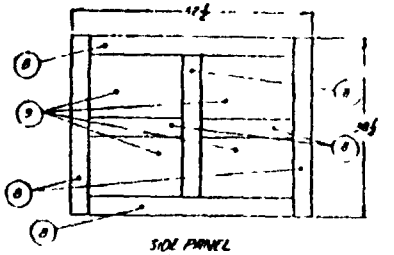
FIGURE 1 CLEATED PLYWOOD BOX, TYPE I, STYLE 1



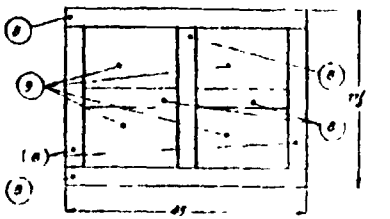
ILLUSTRATION



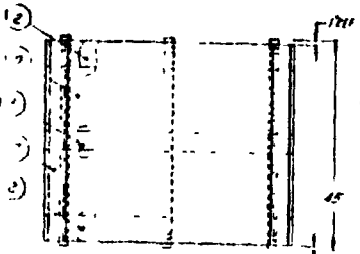
BASE CONSTRUCTION FOR BOX CONSOLIDATION
1600 TO 2600 LB NET WEIGHT

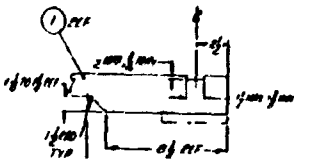


SIDE PANEL
2 REQD

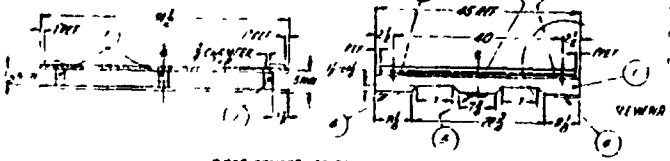


END PANEL
2 REQD





VIEW 'A'
TYP FOR BOTH BASE CONSTRUCTION



BASE CONSTRUCTION FOR BOX CONSOLIDATION
0 TO 1600 LB NET WEIGHT

BILL OF MATERIAL

(1) STRINGERS NOMINAL 1"x4" QUALITY CLASS 3 MIL STD 731
(2) TOP DECK BOARDS NOMINAL 1"x6" QUALITY CLASS 2 MIL STD 731
(3) TOP INTER BOARD NOMINAL 1"x6" QUALITY CLASS 2 MIL STD 731
(4) BOTTOM DECK BOARDS NOMINAL 1"x6" QUALITY CLASS 2 MIL STD 731
(5) BOTTOM INTER BOARD NOMINAL 1"x4" QUALITY CLASS 2 MIL STD 731
(6) BASE PLYWOOD ¾"
(7) WEDGE PC. BOTH ENDS 3" QUALITY CLASS 2 MIL STD 731 CUT TO LENGTH
(8) END & SIDE CLEATS 1"x4" QUALITY CLASS 2 MIL STD 731
(9) END & SIDE PLYWOOD 5/16"
(10) TOP PLYWOOD ½"
(11) STEEL STRAPPING ½" x .020 OR .029 THK, NO LESS THAN 200 LB TEST

BOX TYPE I, STYLE 2

STYLE - NAILED WOOD CLEATED PLYWOOD CONSOLIDATION BOX WITH BASE FOR LOADS

0 TO 1600 LB NET WEIGHT AND
1600 TO 2600 LB NET WEIGHT

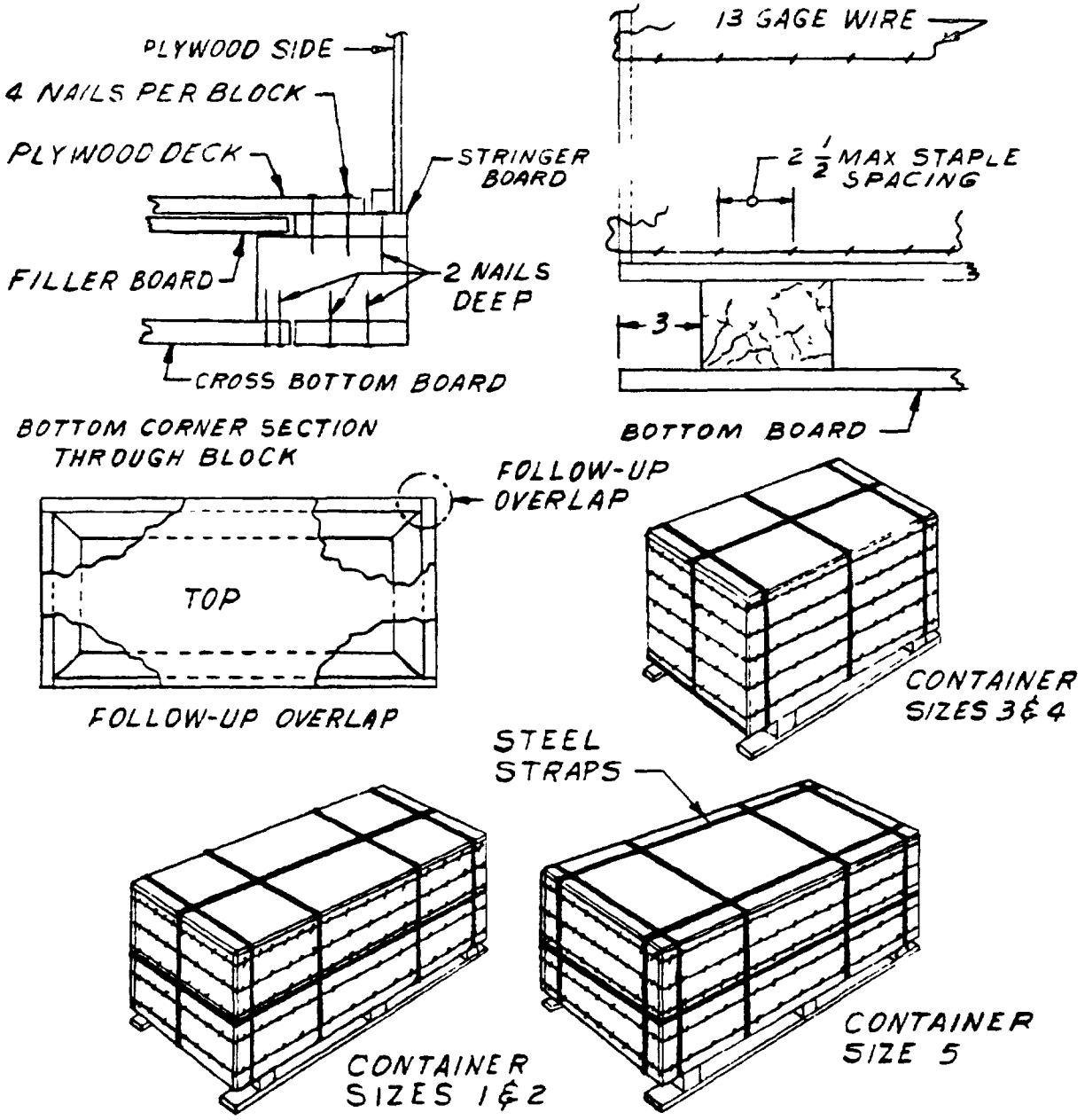
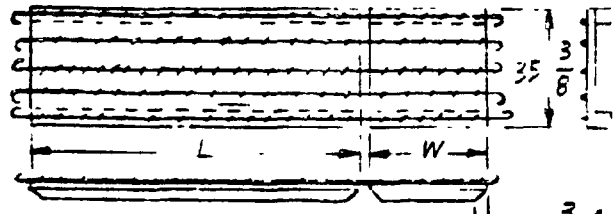
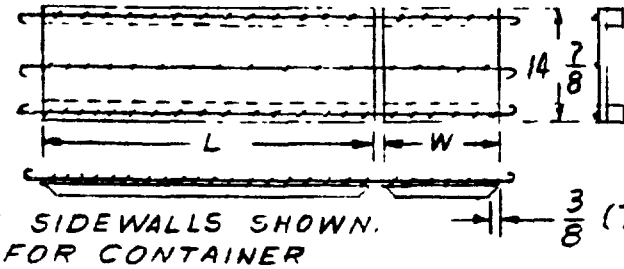


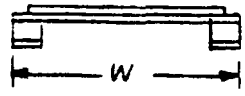
FIGURE 3-
TYPE II, STYLE 1
WIREBOUND-PLYWOOD BOX DETAILS



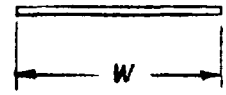
TWO SECTION SIDEWALLS SHOWN.
2 REQD FOR CONTAINER SIZES
1, 2, 3, 4 & 5
L & W ARE EACH 3/8 INCH LESS THAN THE OUTSIDE LENGTH (L) AND WIDTH (W) OF THE CONTAINER.



TWO SECTION SIDEWALLS SHOWN.
2 REQD FOR FOR CONTAINER
SIZES 6, 7, 8, 9 & 10.



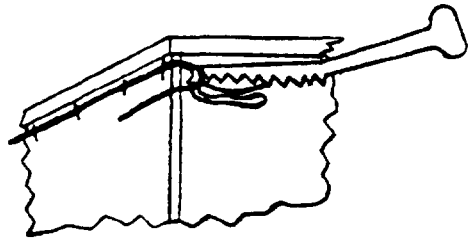
END VIEW - BLOCK TYPE BASE



END VIEW-TOP

CLOSING-LOOP CLOSURES

1. INSERT SALLEE CLOSER THROUGH NARROW LOOP & CATCH WIDE LOOP IN NOTCH AT END OF TOOL.



2. PUSH WIDE LOOP AGAINST SURFACE OF BOX FACE, ENGAGE NARROW LOOP IN TEETH OF TOOL & START SWING.

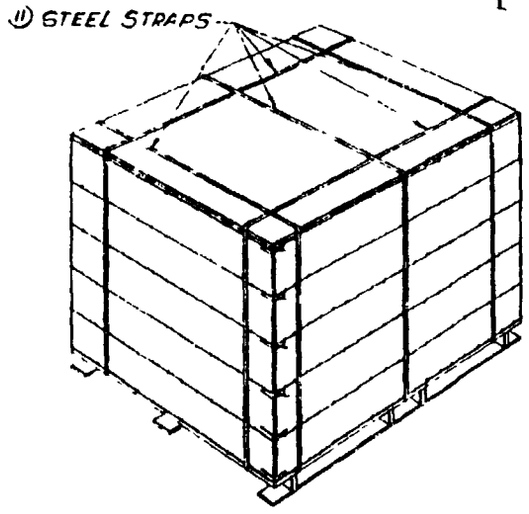
SALLEE CLOSER

3. COMPLETE CLOSING BY SWINGING HANDLE OF SALLEE CLOSER AROUND AS FAR AS POSSIABLE.

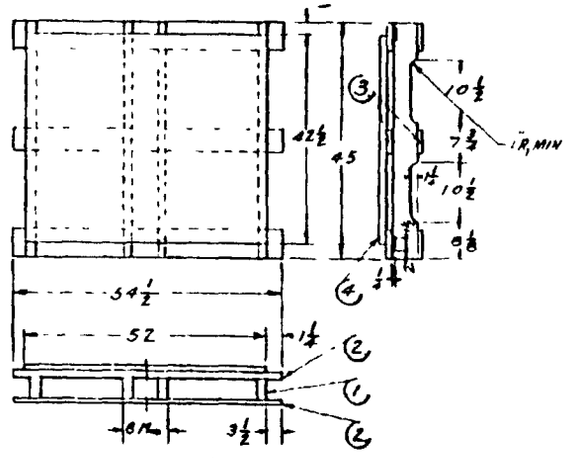
SALLEE CLOSERS ARE AVAILABLE FROM ANY WIREBOUND BOX SUPPLIER.

FIGURE 4 -
TYPE II, STYLE 1
WIREBOUND - PLYWOOD BOX DETAILS

10-1-54

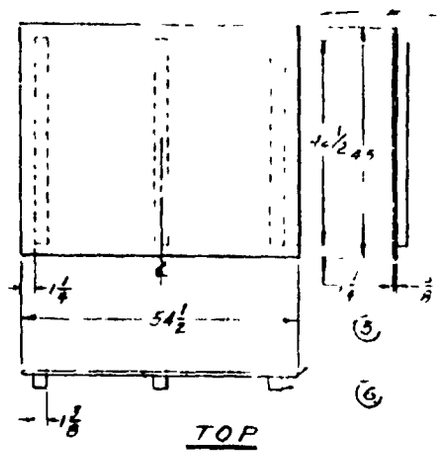


BOX 1 OD 54½ · 45 · 43

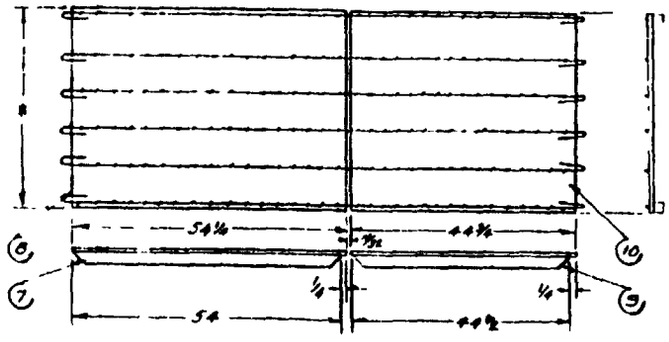


BASE

NOTE BASE SHOWN IS FOR NET WEIGHTS 1600 TO 2600 LBS FOR LOADS UNDER 1600 LBS USE 1 INTERMEDIATE STRINGER LOCATED AT CENTER LINE



TOP



* BOX NO 1 37⅝

BLANK
2 REQD

ITEM NO.	DESCRIPTION	NO REQD	MATERIAL	MATL SPEC	NO
11	STEEL STRAPPING	5	¾ BY MIN 0 085 INCH OR 1269	FED S 781	
10	PLYWOOD	2	37 5/8 · 44 3/4 · ¼		
9	CLEATS	4	44 1/8 · 3/16 · 3/4		
8	PLYWOOD	2	37 5/8 · 54¼ · ¼ (MAYBE 2 PCS)		
7	CLEATS	4	54 · 3/16 · 3/4		
6	BATTENS	3	42½ · 1 5/8 · 3/4 QUALITY, CL 2	MIL STD 731	
5	PLYWOOD	1	54½ · 45 · 3/8 (ONE PC REQD)		
4	PLYWOOD	1	52 · 42½ · 3/8 (MAYBE 2 PCS)		
3	DECKBOARD	2	54½ · 1 · 4 NOM QUALITY, CLASS 2	MIL STD 731	
2	DECKBOARD	4	54½ · 1 · 6 NOM QUALITY, CLASS 2	MIL STD 731	
1	SKIDS	4	45 · 2 · 4 NOM QUALITY, CLASS 2	MIL STD 731	

FIG 2 — WIREBOUND PLYWOOD CONSOLIDATION BOX WITH SKID BASE FOR LOADS 0 TO 1600 LBS NET WT AND 1600 TO 2600 NET WT

TYPE II STYLE 2

10-1 503 E

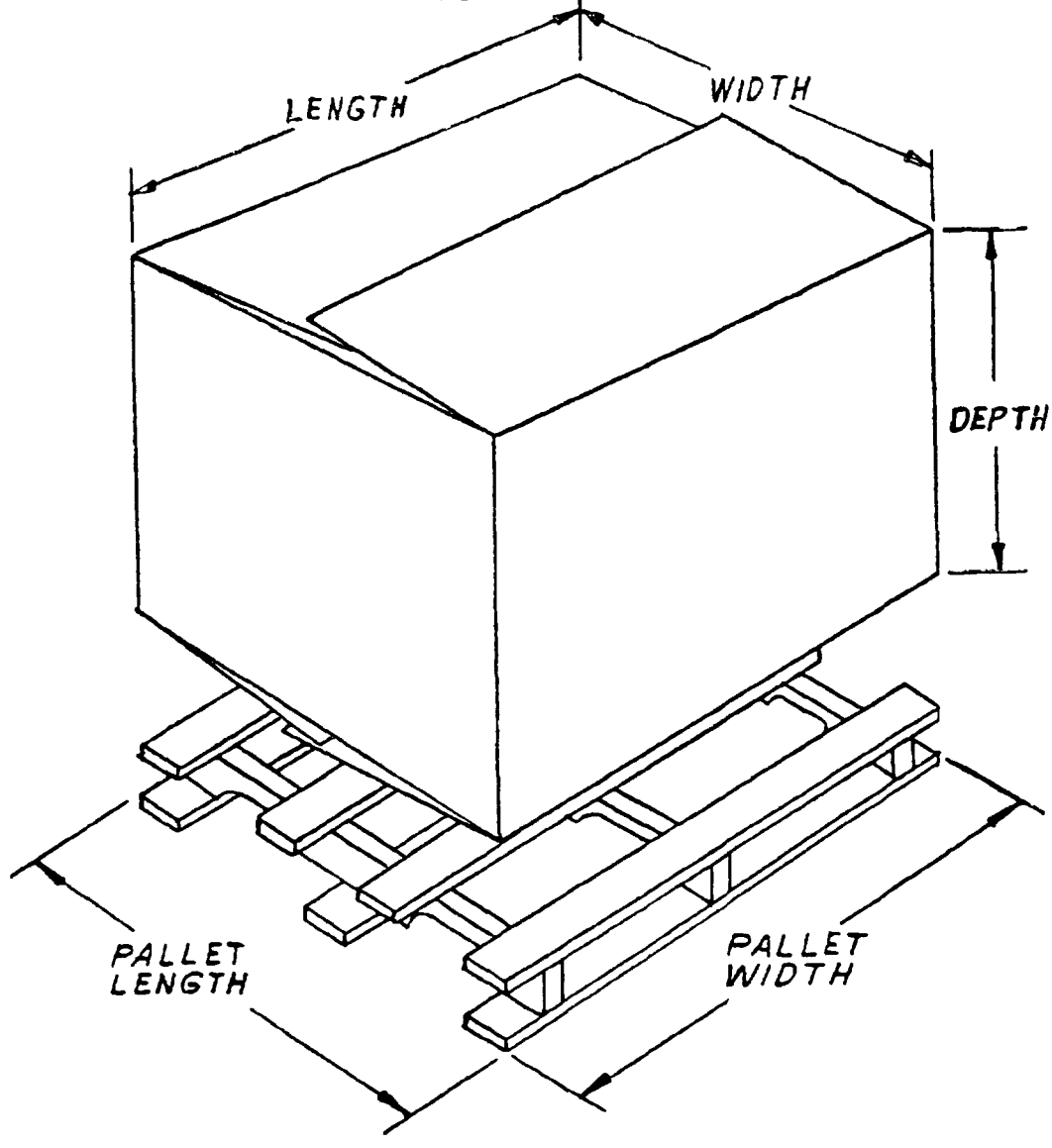


FIGURE 6 -
TYPE III, STYLE 3
REGULAR SLOTTED BOX

REGULAR SLOTTED (RSC) BOX. DOUBLE WING, NOTCHED RUNNER BASE. SEE FIG. 7 FOR ALTERNATE BASE CONSTRUCTION.

10-1-542

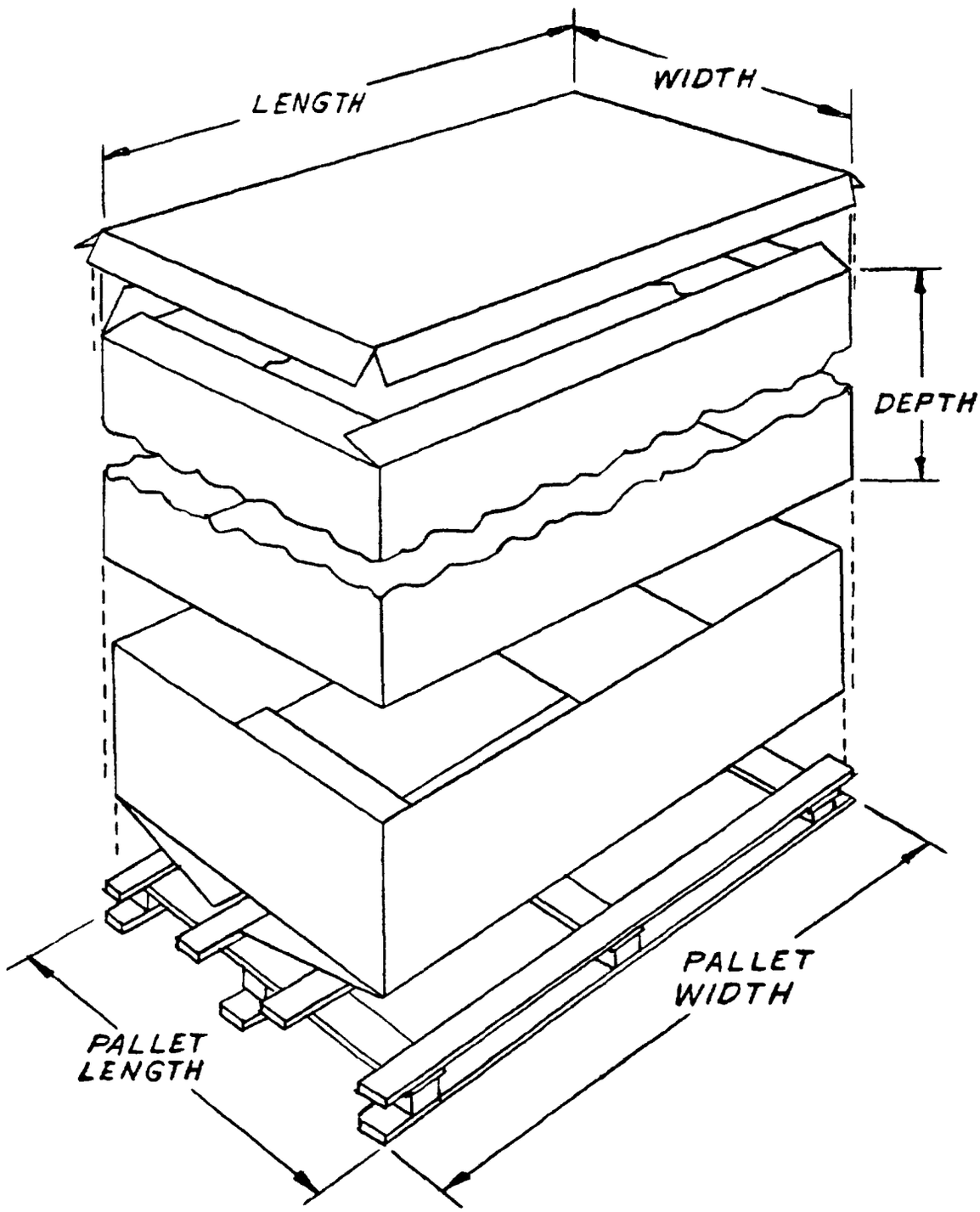


FIGURE 7 -
TYPE III STYLE 4

HALF SLOTTED (HSC) WITH TELESCOPING SLEEVE AND CAP. DOUBLE WING BLOCK TOP BASE SEE FIG. 6 FOR ALTERNATE BASE CONSTRUCTION.

10-1-5#3

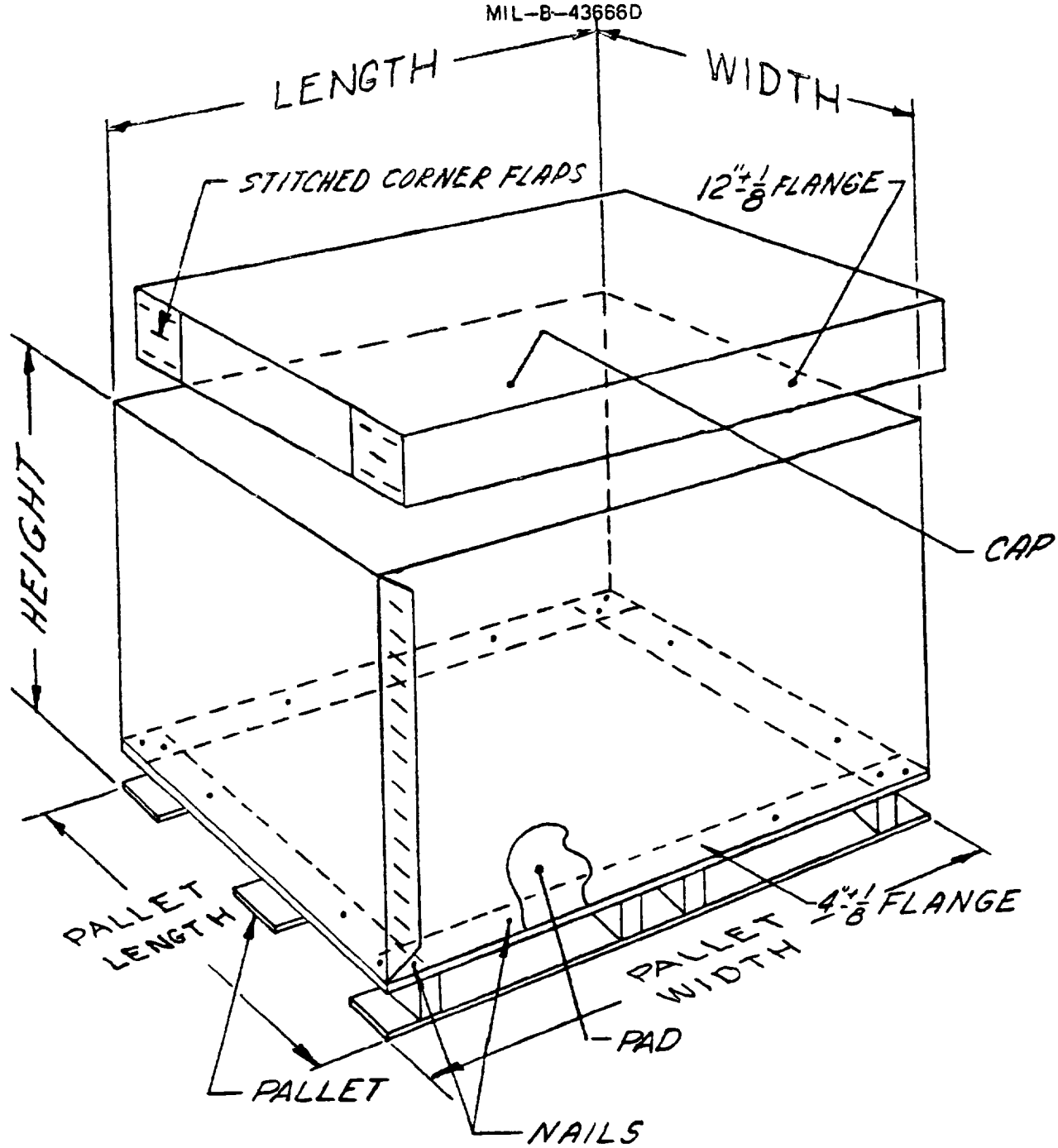
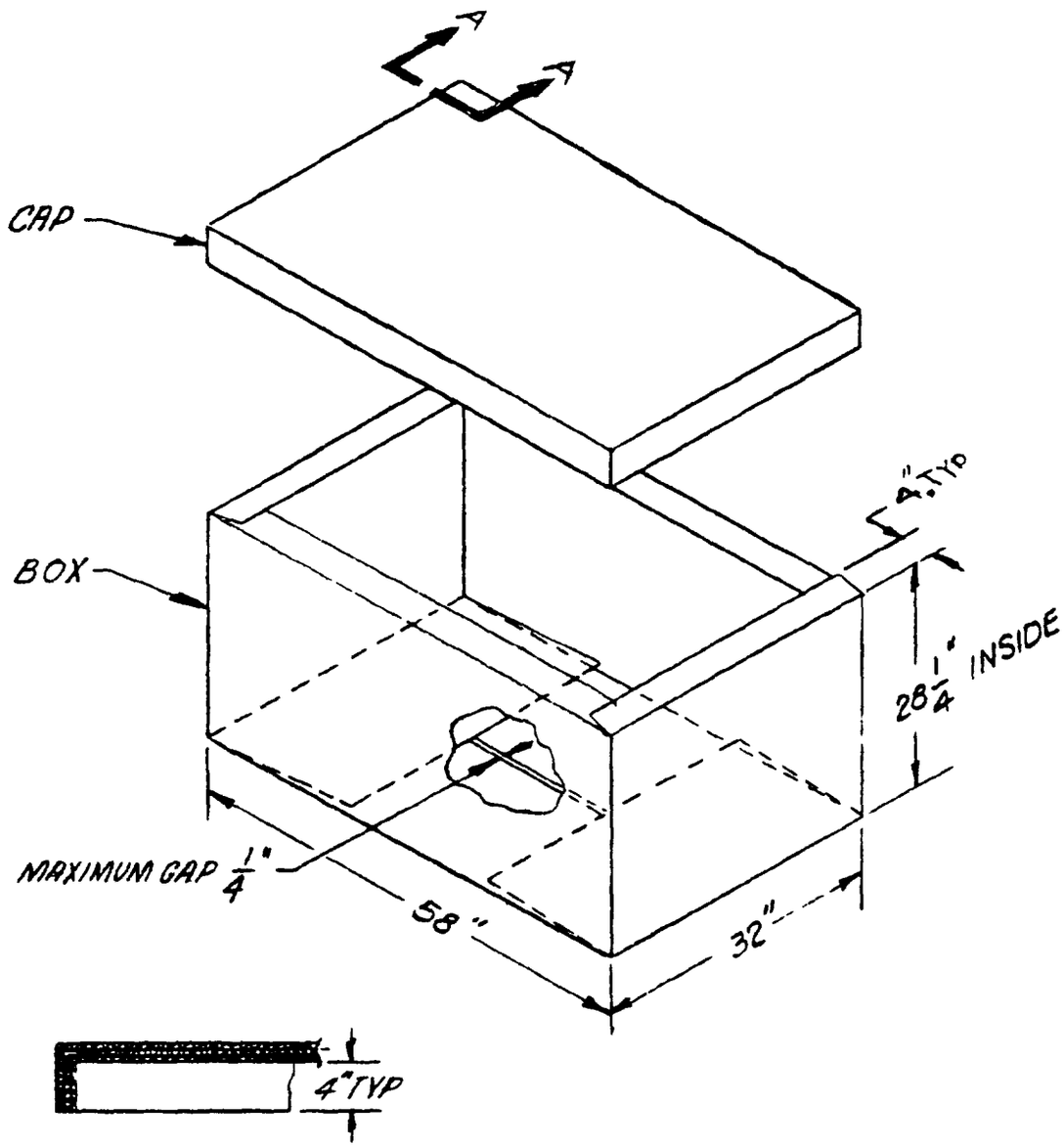


FIGURE 8-FLANGED BOTTON TUBE WITH CAP
TYPE III, STYLE 5

10-1-283L

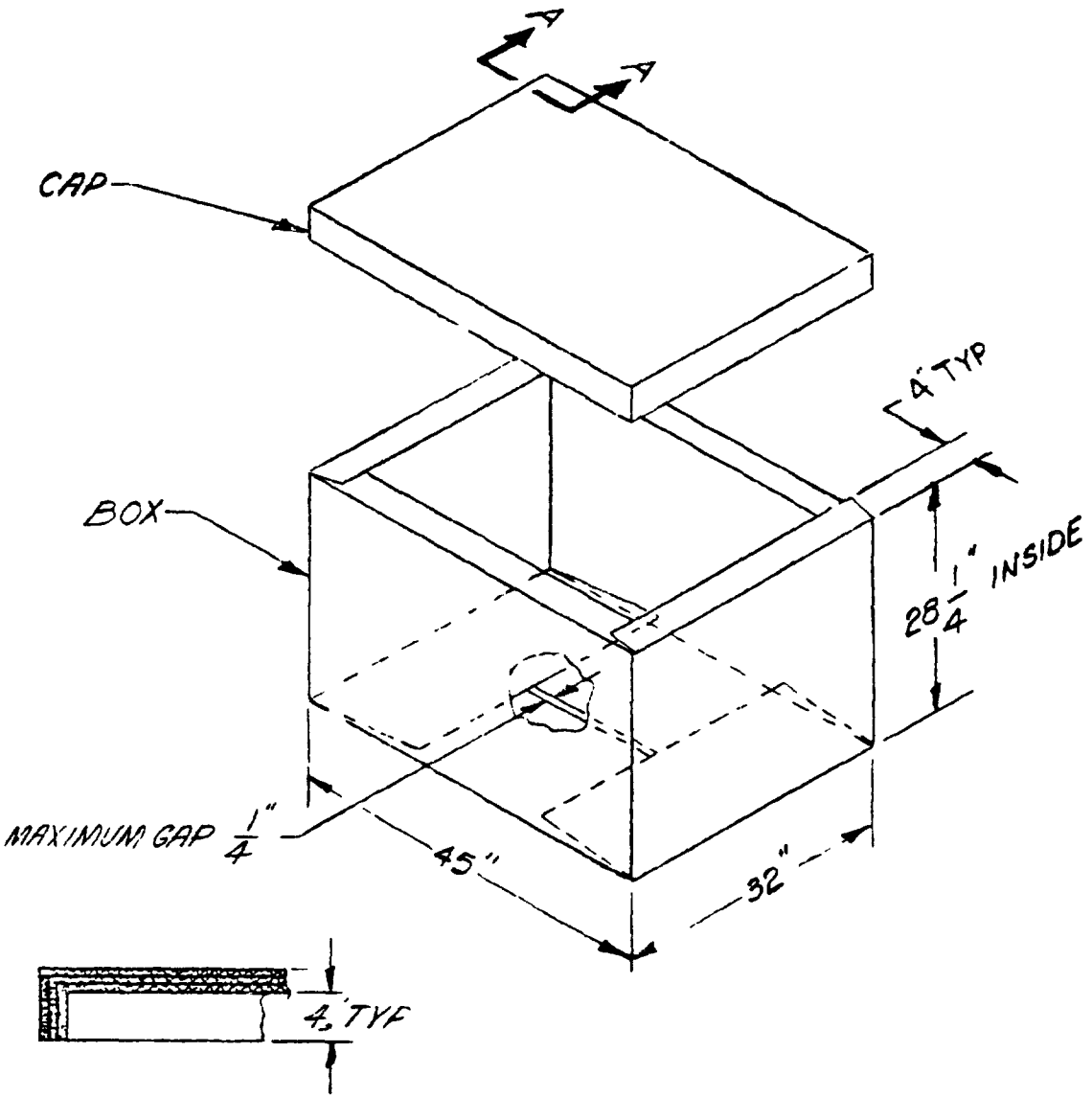
CAP SHALL PROVIDE A SNUG FIT TO THE BOX



SECT A-A
CORNER TYPICAL

FIGURE 9 - FIBERBOARD BOX, HALF SLOTTED CONTAINER HSC WITH CAP, TYPE III, STYLE 6, SIZE 14

CAP SHALL PROVIDE A SNUG FIT TO THE BOX



SECT A-A
CORNER TYPICAL

FIGURE 10-FIBERBOARD BOX, HALF SLOTTED CONTAINER HSC WITH CAP, TYPE III, STYLE 6, SIZE 15

3-1-47

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